

Systematics, Biodiversity and Conservation of the Indian Desert Flora*



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Indian or Thar Desert is a very distinct geographical region of our country. It harbours different cultures, and has a diversified floristic and faunistic composition. However, floristically it is considered as one of the best explored areas of our country. Despite the above statement there still exist many unexplored and underexplored pockets in the desert. As a result of its unique flora composition, a large number of new taxa of plants have been described from this region. Some of these endemic and rare species are greatly threatened as to their very existence and, are, therefore, in urgent need of conservation.

From the biodiversity point of view the Indian Desert has its own importance and peculiarities. It sustains a vast amount of biodiversity of plants and animals. The genetic diversity comprises of genetic variability within a single species such as in *Citrullus colocynthis* and *Lasiurus hirsutus* or between the species of a single genus such as *Tephrosia* or *Tribulus*. A high degree of micro and macro endemics found in the Indian Desert, may not be important from the point of view of the origin of species, but with the changing patterns of our needs regarding food, fodder, fuel, fibre and medicare, we may not be able to foretell today as to which species may be needed when and for what purpose. The ever increasing human and bovine population, the developmental pressure of urbanization, human interferences with nature and the recurring famines are the main causes of biodiversity erosion. There is, therefore, an urgent need to arrest and preserve the erosion of biodiversity of the Indian Desert, both *in situ* or *ex-situ* conditions. Ever continuous and never reversible process of extinction of biodiversity is a crime for which future generation will certainly blame us the most. Conservation of this biodiversity of the Indian Desert, is therefore, most important for the management and sustainable development and in maintaining the most fragile ecological processes and life-support system. Biodiversity in the Indian Desert is closely linked to the cultural diversity since human cultures are closely linked to the environment. The widespread of Jainism and the Jamboji's Bishnoi sects in the desert which feel concerned for diversity and its conservation, is an instance of this.

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